

Applicants: Fahey, et al.

Application No.: 09/530,370

Filed: July 6, 2000

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In the Claims

Please cancel claim 41 without prejudice.

Please amend claims 1, 2, 4, 7, 8, 9, 40, 42 and 46 rewritten to read as follows:

1. (Amended) A method of detecting a member of the taxa actinomycetes,

comprising

(a) sequentially incubating a thiol-selective reagent and a purified antibody that specifically binds to mycothiol or a thiol-containing mycothiol component with a sample for a time sufficient for said reagent or said antibody to react with mycothiol or thiol-containing mycothiol component; and

(b) detecting reaction of said reagent or said antibody with said mycothiol or said thiol-containing mycothiol component,

thereby indicating the presence of a member of the taxa actinomycetes.

2. (Amended) The method of claim 1, wherein said member of the taxa

actinomycetes is mycobacteria.

4. (Amended) The method of claim 1, wherein said antibody is incubated with the

sample before said thiol selective reagent.

17. (Amended) The method of claim 1, further comprising

(c) quantitating said mycothiol or said thiol-containing mycothiol component.

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8. (Amended) The method of claim 1, wherein said thiol-containing mycothiol component is selected from 2-(*N*-acetylcysteinyl)amido-2-deoxy-D-glucopyranose and 1D-*myo*-inosityl-2-(L-cysteinyl)amido-2-deoxy- α -D-glucopyranoside.

19. (Amended) An antibody which binds specifically to mycothiol or a thiol-containing mycothiol component.

40. (Amended) A kit useful for detecting the presence of mycothiol or thiol-containing mycothiol component in a sample, the kit comprising: carrier means being compartmentalized to receive in close confinement therein one or more containers comprising a container containing an antibody specific for mycothiol or a thiol-containing mycothiol component to detect mycothiol or thiol-containing mycothiol component in the sample.

42. (Amended) The kit of claim 40, further comprising a container containing a detection reagent to detect the reaction of the mycothiol or thiol-containing mycothiol component with said antibody to detect mycothiol or thiol-containing mycothiol component.

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46. (Amended) The method of claim 1, wherein the thiol-selective reagent comprises a thiol-reactive biotin derivative and a biotinylated mycothiol or biotinylated thiol-containing mycothiol component is formed in (a); and wherein said detecting in (b) comprises contacting the biotinylated mycothiol or biotinylated thiol-containing mycothiol component with a primary antibody that binds to mycothiol or the thiol-containing mycothiol component to form a complex and detecting the presence of said complex with a detection reagent that binds to biotin.